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D1 cancel
LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or a LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein the $\alpha_v\beta_3$ binding affinity of said enhanced LM609 grafted antibody is maintained relative to parental LM609 grafted antibody.

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60. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_H CDR1 is selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEQ ID NO:52.

61. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_H CDR2 is selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

62. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_H CDR3 is selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100.

63. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_L CDR1 is the CDR referenced as SEQ ID NO:82.

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64. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_L CDR2 is the CDR referenced as SEQ ID NO:84.

65. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V_L CDR3 is selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92.

67. (Amended) The enhanced LM609 grafted antibody of claim 66, wherein said functional fragment is selected from the group consisting of Fv, Fab, $F(ab)_2$ and scFV.

69. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said enhanced LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2

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referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3 referenced as SEQ ID NO:68; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68.

71. (Amended) The enhanced LM609 grafted antibody of claim 70, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

73. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said enhanced LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:98; and

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the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:100.

17. (Twice amended) A high affinity LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising one or more CDRs having at least one amino acid substitution in one or more CDRs of a LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or a LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein the $\alpha_v\beta_3$ binding affinity of said high affinity LM609 grafted antibody is higher affinity relative to parental LM609 grafted antibody.

77. (Amended) The high affinity LM609 grafted antibody of claim 108, wherein said high affinity LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2

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referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:98; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:100.

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D9
80. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_H CDR1 selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEQ ID NO:52.

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82. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_H CDR2 selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

D11
84. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_H CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96, SEQ ID NO:98 and SEQ ID NO:100.

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86. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_L CDR1 referenced as SEQ ID NO:82.

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88. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_L CDR2 referenced as SEQ ID NO:84.

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90. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V_L CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92.

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92. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3 referenced as SEQ ID NO:68; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68.

93. (Amended) The antibody of claim 92, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

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94. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

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the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:98; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:100.

95. (Amended) The antibody of claim 94, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

96. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3

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referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3

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referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3

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referenced as SEQ ID NO:98; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2
referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID
NO:100.

Please add the following new claims.

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105. (New) The enhanced LM609 grafted antibody of
claim 74, wherein said enhanced LM609 grafted antibody has an
increased association rate relative to parental LM609 grafted
antibody.

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106. (New) The enhanced LM609 grafted antibody of
claim 74, wherein said enhanced LM609 grafted antibody has a
decreased dissociation rate relative to parental LM609 grafted
antibody.

107. (New) An enhanced LM609 grafted antibody
exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional
fragment thereof, comprising one or more CDRs selected from the
group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ
ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62,
SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID
NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80,
SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID
NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and
SEQ ID NO:100, said antibody or functional fragment thereof
having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding

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specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein the $\alpha_v\beta_3$ binding affinity of said enhanced LM609 grafted antibody is maintained relative to parental LM609 grafted antibody having CDRs of the LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or the LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8.

108. (New) A high affinity LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96, SEQ ID NO:98 and SEQ ID NO:100, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein the $\alpha_v\beta_3$ binding affinity of said high affinity LM609 grafted antibody is higher affinity relative to parental LM609 grafted antibody having CDRs of the LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or the LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8.

109. (New) An antibody, or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID

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NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80,
SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID
NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and
SEQ ID NO:100.

6 110. (New) An antibody, or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity.

111. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_H CDR1 selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEQ ID NO:52.

112. (New) The antibody of claim 111, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

113. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_H CDR2 selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

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114. (New) The antibody of claim 113, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

115. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_H CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100.

116. (New) The antibody of claim 115, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

117. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_L CDR1 referenced as SEQ ID NO:82.

118. (New) The antibody of claim 117, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

119. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_L CDR2 referenced as SEQ ID NO:84.

120. (New) The antibody of claim 119, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

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121. (New) The antibody of claim 110, or functional fragment thereof, comprising a V_L CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92.

122. (New) The antibody of claim 121, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

123. (New) The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3

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referenced as SEQ ID NO:68; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68.

124. (New) The antibody of claim 123, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

125. (New) The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:98; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:100.

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126. (New) The antibody of claim 125, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

127. (New) The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:70;

the V_L CDR1 referenced as SEQ ID NO:82 and the V_H CDR3 referenced as SEQ ID NO:72;

the V_L CDR3 referenced as SEQ ID NO:86, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2

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referenced as SEQ ID NO:56 and V_H CDR3 referenced as SEQ ID NO:68;

the V_L CDR1 referenced as SEQ ID NO:82, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:96;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:94;

the V_L CDR3 referenced as SEQ ID NO:90 and the V_H CDR3 referenced as SEQ ID NO:98; and

the V_L CDR3 referenced as SEQ ID NO:90, the V_H CDR2 referenced as SEQ ID NO:56 and the V_H CDR3 referenced as SEQ ID NO:100.

128. (New) The antibody of claim 127, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

REMARKS

Claims 56-104 are pending. Claims 56-59, 62, 65-68, 70-77, 84, 90, 91 and 94-97 are under examination as reading on the elected species. Claims 60, 61, 63, 64, 69, 78-83, 92 and 93 are withdrawn as directed to a nonelected species, and claims 98-104 are withdrawn as directed to a nonelected invention. Applicant requests clarification as to whether claims 86-89 are under examination or withdrawn from consideration.

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